



PATENT  
ATTORNEY DOCKET NO.: 041993-5360

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	
	)	
Hun-Jun CHOO, <i>et al.</i>	)	
	)	
Application No.: 10/691,656	)	Group Art Unit: Unassigned
	)	
Filed: October 24, 2003	)	Examiner: Unassigned
	)	
For: APPARATUS AND METHOD FOR	)	
MEASURING GROUND AMOUNTS OF	)	
LIQUID CRYSTAL DISPLAY PANEL	)	

Commissioner for Patents  
Arlington, Virginia 22202

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO Form 1449. To the best of the undersigned's knowledge, this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application. Accordingly, Applicants do not believe that a fee is due for filing this paper.

Copies of the listed documents are attached.

The relevance of the non-English language documents can be understood from the drawings respectively therein and from the respectively attached abstracts.

Applicants request that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached PTO Form 1449.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each of the listed documents are material or constitute

"Prior Art." If it should be determined that the listed documents do not constitute "Prior Art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should the documents be applied against the claims of the present application.


**EXCEPT** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

**MORGAN, LEWIS & BOCKIUS LLP**

Dated: January 6, 2003

By: \_\_\_\_\_

  
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# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

PTO Form 1449

Attorney Docket No.  
041993-5360

Application No.:  
10/691,656

Applicants: Hun-Jun CHOO, *et al.* Sheet 1 of 10

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Group Art Unit: Unassigned

## U.S. PATENT DOCUMENTS

*Examiner Initial	Document Number	Date	Name	Class	Sub Class	Filing Date
	3,978,580	09/07/1976	Leupp, et al.			09/27/1974
	4,094,058	06/13/1978	Yasutake, et al.			07/23/1976
	4,653,864	03/31/1987	Baron, et al.			02/26/1986
	4,691,995	09/08/1987	Yamazaki, et al.			07/15/1986
	4,775,225	10/04/1988	Tsuboyama, et al.			05/14/1986
	5,247,377	09/21/1993	Omeis, et al.			07/24/1989
	5,263,888	11/23/1993	Ishihara, et al.			02/11/1993
	5,379,139	01/03/1995	Sato, et al.			07/06/1992
	5,406,989	04/18/1995	Abe			10/12/1993
	5,499,128	03/12/1996	Hasegawa, et al.			03/15/1994
	5,507,323	04/16/1996	Abe			11/22/1994
	5,511,591	04/30/1996	Abe			04/10/1995
	5,539,545	07/23/1996	Shimizu, et al.			05/17/1994
	5,548,429	08/20/1996	Tsujita			06/14/1994
	5,642,214	06/24/1997	Ishii, et al.			07/05/1994
	5,680,189	10/21/1997	Shimizu, et al.			06/07/1995
	5,742,370	04/21/1998	Kim, et al.			02/26/1997

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Group Art Unit: Unassigned

## U.S. PATENT DOCUMENTS

*Examiner Initial	Document Number	Date	Name	Class	Sub Class	Filing Date
	5,757,451	05/26/1998	Miyazaki, et al.			09/09/1996
	5,852,484	12/22/1998	Inoue, et al.			05/27/1997
	5,854,664	12/29/1998	Inoue, et al.			09/25/1995
	5,861,932	01/19/1999	Inata, et al.			03/30/1998
	5,875,922	03/02/1999	Chastine, et al.			10/10/1997
	5,952,676	09/14/1999	Sato, et al.			06/06/1997
	5,956,112	09/21/1999	Fujimori, et al.			10/01/1996
	6,001,203	12/14/1999	Yamada, et al.			12/10/1997
	6,011,609	01/04/2000	Kato, et al.			10/02/1997
	6,016,178	01/18/2000	Kataoka, et al.			03/14/1997
	6,016,181	01/18/2000	Shimada			01/21/1997
	6,055,035	04/25/2000	von Gutfeld, et al.			05/11/1998
	6,163,357	12/19/2000	Nakamura			09/26/1997
	6,219,126	04/17/2001	Von Gutfeld			11/20/1998
	6,226,067	05/01/2001	Nishiguchi, et al.			09/30/1998
	6,236,445	05/22/2001	Foschaar, et al.			02/22/1996
	6,304,306	10/16/2001	Shiomi, et al.			04/20/1998
Examiner			Date Considered			
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**PTO Form 1449**

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10/691,656

Applicants: Hun-Jun CHOO, *et al.* **Sheet 3 of 10**

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**U.S. PATENT DOCUMENTS**

*Examiner Initial	Document Number	Date	Name	Class	Sub Class	Filing Date
	6,304,311	10/16/2001	Egami, et al.			11/11/1999
	6,337,730	01/08/2002	Ozaki, et al.			06/01/1999
	6,414,733	07/02/2002	Ishikawa, et al.			02/07/2000
	2001/0021000	09/13/2001	Egami			02/01/2001

**FOREIGN PATENT DOCUMENTS**

Document Number	Date	Country	Class	Sub Class	Translation YES NO	
51-65656	06/07/1976	Japan			Abstract	
57-38414	03/03/1982	Japan			Abstract	
57-88428	06/02/1982	Japan			Abstract	
58-27126	02/17/1983	Japan			Abstract	
59-57221	04/02/1984	Japan			Abstract	
59-195222	11/06/1984	Japan			Abstract	
60-111221	06/17/1985	Japan			Abstract	
60-164723	08/27/1985	Japan			Abstract	
60-217343	10/30/1985	Japan			Abstract	
61-7822	01/14/1986	Japan			Abstract	

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## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	
							YES	NO
		61-55625	03/20/1986	Japan			Abstract	
		62-89025	04/23/1987	Japan			Abstract	
		62-90622	04/25/1987	Japan			Abstract	
		62-205319	09/09/1987	Japan			Abstract	
		63-109413	05/14/1988	Japan			Abstract	
		63-110425	05/14/1988	Japan			Abstract	
		63-128315	05/31/1988	Japan			Abstract	
		63-311233	12/20/1988	Japan			Abstract	
		5-127179	05/25/1993	Japan			Abstract	
		5-154923	06/22/1993	Japan			Abstract	
		5-265011	10/15/1993	Japan			Abstract	
		5-281557	10/29/1993	Japan			Abstract	
		5-281562	10/29/1993	Japan			Abstract	
		6-148657	05/27/1994	Japan			Abstract	
		6-160871	06/07/1994	Japan			Abstract	
		6-235925	08/23/1994	Japan			Abstract	
		6-265915	09/22/1994	Japan			Abstract	
		6-313870	11/08/1994	Japan			Abstract	

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## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	
							YES	NO
		6-51256	02/25/1994	Japan			Abstract	
		7-84268	03/31/1995	Japan			Abstract	
		7-128674	05/19/1995	Japan			Abstract	
		7-181507	07/21/1995	Japan			Abstract	
		8-95066	04/12/1996	Japan			Abstract	
		8-101395	04/16/1996	Japan			Abstract	
		8-106101	04/23/1996	Japan			Abstract	
		8-171094	07/02/1996	Japan			Abstract	
		8-190099	07/23/1996	Japan			Abstract	
		8-240807	09/17/1996	Japan			Abstract	
		9-5762	01/10/1997	Japan			Abstract	
		9-26578	01/28/1997	Japan			Abstract	
		9-61829	03/07/1997	Japan			Abstract	
		9-73075	03/18/1997	Japan			Abstract	
		9-73096	03/18/1997	Japan			Abstract	
		9-127528	05/16/1997	Japan			Abstract	

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## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Sub Class	Translation	
							YES	NO
		9-230357	09/05/1997	Japan			Abstract	
		9-281511	10/31/1997	Japan			Abstract	
		9-311340	12/02/1997	Japan			Abstract	
		10-123537	05/15/1998	Japan			Abstract	
		10-123538	05/15/1998	Japan			Abstract	
		10-142616	05/29/1998	Japan			Abstract	
		10-177178	06/30/1998	Japan			Abstract	
		10-221700	08/21/1998	Japan			Abstract	
		10-282512	10/23/1998	Japan			Abstract	
		10-333157	12/18/1998	Japan			Abstract	
		10-333159	12/18/1998	Japan			Abstract	
		11-14953	01/22/1999	Japan			Abstract	
		11-38424	02/12/1999	Japan			Abstract	
		11-64811	03/05/1999	Japan			Abstract	
		11-109388	04/23/1999	Japan			Abstract	
		11-133438	05/21/1999	Japan			Abstract	
		11-142864	05/28/1999	Japan			Abstract	

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## FOREIGN PATENT DOCUMENTS


		Document Number	Date	Country	Class	Sub Class	Translation	
							YES	NO
		11-174477	07/02/1999	Japan			Abstract	
		11-212045	08/06/1999	Japan			Abstract	
		11-248930	09/17/1999	Japan			Abstract	
		11-326922	11/26/1999	Japan			Abstract	
		11-344714	12/14/1999	Japan			Abstract	
		2000-2879	01/07/2000	Japan			Abstract	
		2000-56311	02/25/2000	Japan			Abstract	
		2000-66165	03/03/2000	Japan			Abstract	
		2000-137235	05/16/2000	Japan			Abstract	
		2000-147528	05/26/2000	Japan			Abstract	
		2000-193988	07/14/2000	Japan			Abstract	
		2000-241824	09/08/2000	Japan			Abstract	
		2000-284295	10/13/2000	Japan			Abstract	
		2000-29035	01/28/2000	Japan			Abstract	
		2000-292799	10/20/2000	Japan			Abstract	
		2000-310759	11/07/2000	Japan			Abstract	
		2000-310784	11/07/2000	Japan			Abstract	

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 <p>INFORMATION DISCLOSURE CITATION</p> <p>(Use several sheets if necessary)</p> <p>PTO Form 1449</p>	Attorney Docket No. 041993-5360	Application No.: 10/691,656
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**FOREIGN PATENT DOCUMENTS**

		Document Number	Date	Country	Class	Sub Class	Translation	
							YES	NO
		2000-338501	12/08/2000	Japan			Abstract	
		2001-5401	01/12/2001	Japan			Abstract	
		2001-5405	01/12/2001	Japan			Abstract	
		2001-13506	01/19/2001	Japan			Abstract	
		2001-33793	02/09/2001	Japan			Abstract	
		2001-42341	02/16/2001	Japan			Abstract	
		2001-51284	02/23/2001	Japan			Abstract	
		2001-66615	03/16/2001	Japan			Abstract	
		2001-91727	04/06/2001	Japan			Abstract	
		2001-117105	04/27/2001	Japan			Abstract	
		2001-117109	04/27/2001	Japan			Abstract	
		2001-133745	05/18/2001	Japan			Abstract	
		2001-133794	05/18/2001	Japan			Abstract	
		2001-133799	05/18/2001	Japan			Abstract	
		2001-142074	05/25/2001	Japan			Abstract	
		2001-147437	05/29/2001	Japan			Abstract	
		2001-154211	06/08/2001	Japan			Abstract	

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## FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Sub Class	Translation	
						YES	NO
	2001-166272	06/22/2001	Japan			Abstract	
	2001-166310	06/22/2001	Japan			Abstract	
	2001-183683	07/06/2001	Japan			Abstract	
	2001-201750	07/27/2001	Japan			Abstract	
	2001-209052	08/03/2001	Japan			Abstract	
	2001-209060	08/03/2001	Japan			Abstract	
	2001-215459	08/10/2001	Japan			Abstract	
	2001-222017	08/17/2001	Japan			Abstract	
	2001-235758	08/31/2001	Japan			Abstract	
	2001-255542	09/21/2001	Japan			Abstract	
	2001-264782	09/26/2001	Japan			Abstract	
	2001-272640	10/05/2001	Japan			Abstract	
	2001-281675	10/10/2001	Japan			Abstract	
	2001-281678	10/10/2001	Japan			Abstract	
	2001-282126	10/12/2001	Japan			Abstract	
	2001-305563	10/13/2001	Japan			Abstract	
	2001-330837	11/30/2001	Japan			Abstract	

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## FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Sub Class	Translation	
						YES	NO
	2001-330840	11/30/2001	Japan			Abstract	
	2001-356353	12/26/2001	Japan			Abstract	
	2001-356354	12/26/2001	Japan			Abstract	
	2002-14360	01/18/2002	Japan			Abstract	
	2002-23176	01/23/2002	Japan			Abstract	
	2002-49045	02/15/2002	Japan			Abstract	
	2002-82340	03/22/2002	Japan			Abstract	
	2002-90759	03/27/2002	Japan			Abstract	
	2002-90760	03/27/2002	Japan			Abstract	
	2002-107740	04/10/2002	Japan			Abstract	
	2002-122872	04/26/2002	Japan			Abstract	
	2002-122873	04/26/2002	Japan			Abstract	
	2002-139734	05/17/2002	Japan			Abstract	
	2002-202512	07/19/2002	Japan			Abstract	
	2002-202514	07/19/2002	Japan			Abstract	
	2002-214626	07/31/2002	Japan			Abstract	
	2000-0035302	06/26/2000	Korea			Abstract	
	1 003 066	05/24/2000	Europe				

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/Michael Caley/

Date Considered

02/06/2008

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